

# Balancing

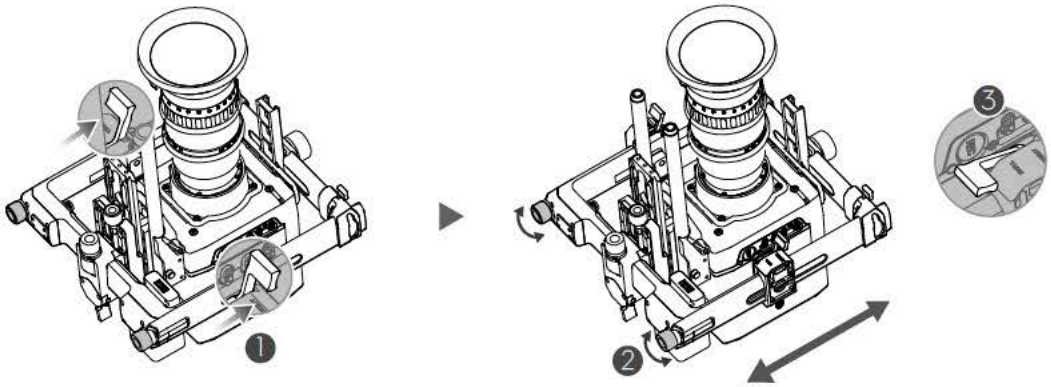
To obtain the best performance from the Ronin 2, proper balancing is essential. Accurate balance is critical for shots where the Ronin 2 will be subjected to fast motion or acceleration (running, biking, moving in cars, attached to aircraft, etc.). Proper balance will also offer longer battery runtimes. There are three axes that need to be accurately balanced prior to turning on the Ronin 2 and setting up the software.

## Before Balancing

1. Before balancing the camera, connect the SDI cable and the camera's power cable and install a Focus system.
2. The camera needs to be fully configured, with all accessories and cables connected, prior to installing and balancing the camera on the gimbal. If the camera has a lens cap, be sure to remove it prior to balancing.
3. Be sure that the Ronin 2's power and camera are turned off while balancing the camera.

## Step 1: Balancing the Vertical Tilt

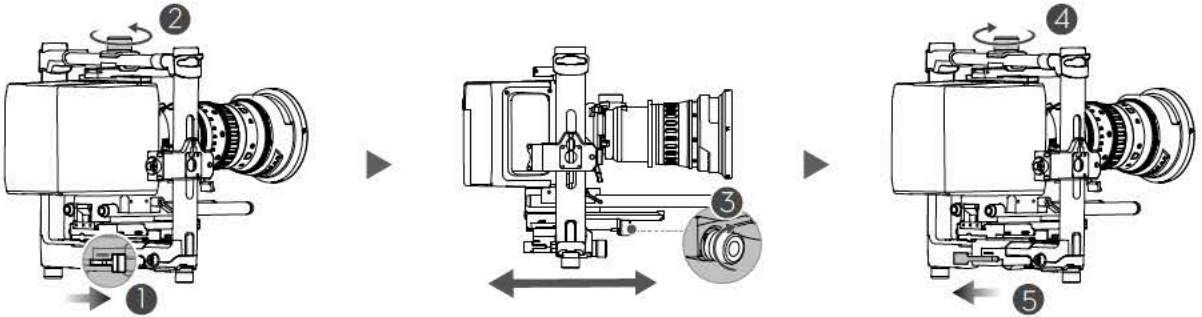
1. Unlock the tilt axis. Rotate the tilt axis so that the camera lens is pointing up.
2. Push up on the side levers ① to their unlocked position. Then adjust the camera's balance by turning the adjustment knob ②. Make adjustments until the camera appears balanced without tilting up or down.
3. Tighten the levers ③.



**⚠** Ensure that the measurement marks match up on both of the vertical bars. If they do not match up, the assembly could possibly be skewed higher or lower on one side, which would cause the tilt motor to bind.

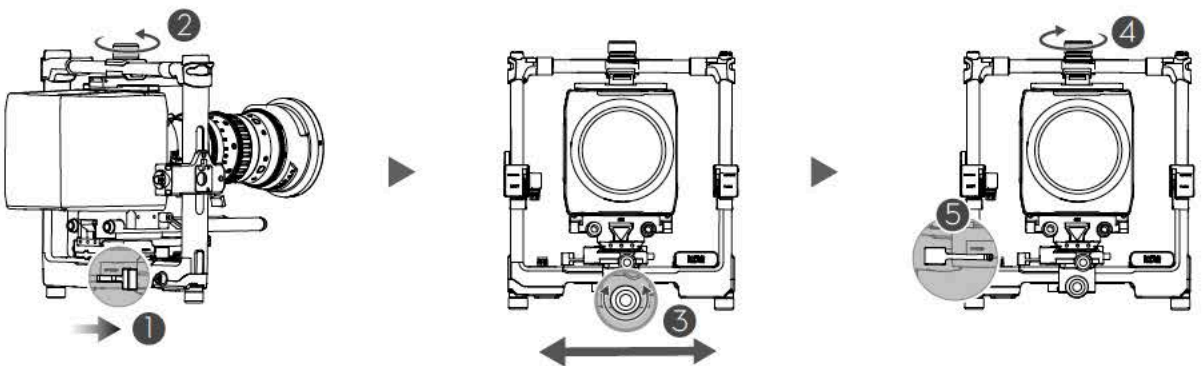
## Step 2: Balancing Depth for the Tilt Axis

1. Rotate the tilt axis so that the camera lens is pointing forward.
2. Toggle the lever ① to the unlocked position and then loosen the top securing knob ②. Adjust the camera's balance by turning the adjustment knob ③ until the camera remains still when rotating the tilt axis 45 degrees upwards or downwards.
3. Tighten the securing knob ④ and toggle the lever ⑤ to the locked position.
4. Lock the tilt axis.



## Step 3: Balancing the Roll Axis

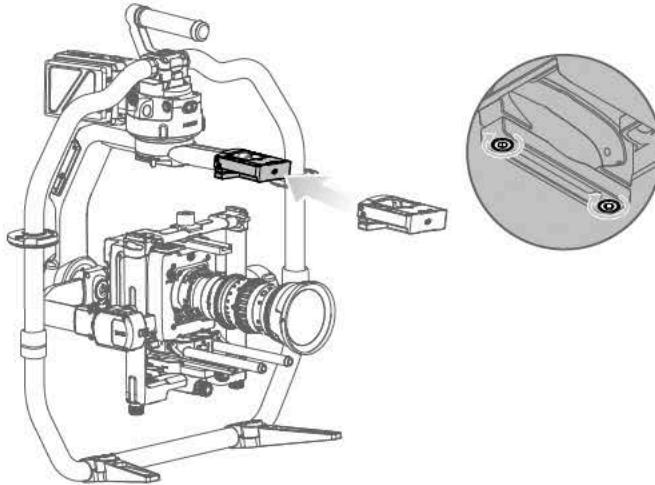
1. Unlock the roll axis.
2. Toggle the lever ① to the unlocked position, then loosen the top securing knob ②. Adjust the camera's position by turning the adjustment knob ③ until the camera remains still when rotating the tilt axis 45 degrees to the left or right.
3. Tighten the securing knob ④ and toggle the lever ⑤ to the locked position.
4. Lock the roll axis.



**⚠** Recheck the tilt axis balance. Loosen the securing knob and adjust the camera's position if the tilt axis is not balanced.

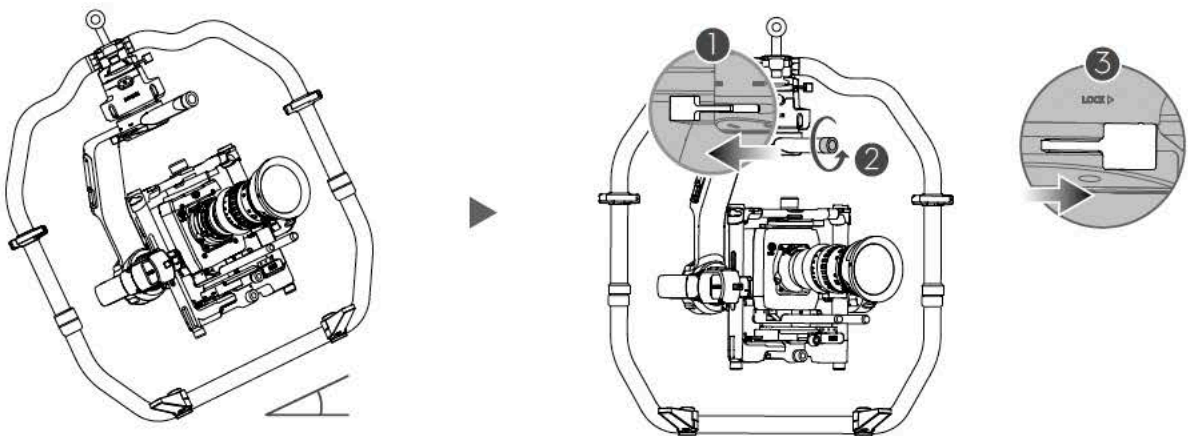
## Step 4: Balancing the Pan Axis

Please note: It is recommended to mount the provided MotionBlock before balancing the pan axis when shooting in a high-speed situation for improved gimbal performance. Attach the MotionBlock to the pan axis and tighten the screws as shown.



**⚠** It is necessary to use the optional Counterweights if mounting a longer camera system and the MotionBlock cannot be mounted due to the pan axis balancing position. Visit the official DJI Online Store to learn more.

1. Unlock the pan axis. Lift up one side of the Grip.
2. Toggle the lever ① to the unlocked position, then adjust the camera's position by turning the adjustment knob ② until the camera remains still when rotating the pan axis 45 degrees while lifting up one side of the Grip.
3. Tighten the lever ③.



**⚠** It is necessary to use the optional Counterweights if mounting a camera and the camera system cannot be moved back far enough for balancing.